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## LISTERIOSIS

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**Clinical Features:** Symptoms vary and are dependent on the individual affected. Neonates, elderly, immunocompromised individuals, and pregnant women are at highest risk. Symptoms include fever, malaise, headache, nausea, vomiting, meningitis, septicemia, delirium, and coma. On rare occasion, symptoms may include endocarditis, granulomatous lesions in the liver and other organs, localized internal or external abscesses, and pustular or papular cutaneous lesion. In pregnant women, infection can be transmitted to the fetus, and infants may be stillborn, born with septicemia, or develop meningitis in the neonatal period - even though the mother may be asymptomatic at delivery.

**Causative Agent:** *Listeria monocytogenes*, a gram-positive bacterium.

**Mode of Transmission:** Ingestion of raw or contaminated milk, soft cheeses, vegetables, pate, unwashed raw vegetables, and ready to eat meats, such as deli meat and hot dogs. Direct contact with infected materials may lead to papular lesions on hands and arms. In utero transmission from mother to fetus may occur; transmission during passage through the infected birth canal is also possible. The principal reservoir of *Listeria monocytogenes* is in soil, forage, water, mud and silage. Other reservoirs include infected domestic and wild mammals, fowl, and people. Asymptomatic fecal carriage is common in humans.

**Incubation Period:** Ranges from 3-70 days (average 3 weeks).

**Period of Communicability:** Mothers of infected newborn infants can shed the infectious agent in vaginal discharges and urine for 7-10 days after delivery, rarely longer. However, infected individuals can shed the organisms in their stool for several months.

**Public Health Significance:** Pregnant women, fetuses and newborns infants are highly susceptible. The postpartum course of the mother is usually uneventful, but the case fatality rate is 30% in newborn infants and approaches 50% when onset occurs in the first 4 days. Severe disease in adults, including pregnant women, associated with contaminated food emphasized that older children and adults can have systemic disease with mortality. Listeriosis is often associated with contaminated food products. A product recall may be issued if *Listeria* contamination is suspected.

**Reportable Disease in Kansas Since:** 2000

### ***Laboratory Criteria for Surveillance Purposes***

- Isolation of *L. monocytogenes* from a normally sterile site (e.g., blood or cerebrospinal fluid [CSF] or, less commonly, joint, pleural, or pericardial fluid),  
**OR**
- In the setting of miscarriage or stillbirth, isolation of *L. monocytogenes* from placental or fetal tissues.

### ***Surveillance Case Definitions***

- *Confirmed*: A clinically compatible case that is laboratory confirmed.
- *Probable*: A clinically compatible case that is epidemiologically linked to a confirmed case.

***2005 Kansas Count: 7***

	<i>Rate per 100,000</i>	<i>95% CI</i>
Kansas Rate	0.3	(0.1 – 0.4)
U.S. Rate (2004)	0.3	NA

Seven cases of listeriosis were reported in Kansas in 2005. Five (71%) of the seven cases were female; cases ranged from 53 to 75 years in age, with a median age of 71 years. Hospitalization status was obtained for four of the seven cases—all four were hospitalized because of their illness. No deaths were reported.